REMARKS

This paper is responsive to the Final Office Action dated August 11, 2003, having a shortened statutory period expiring on November 11, 2003, wherein:

Claims 1-8, 10-35, and 37-61 were previously pending in the application;

Claims 10-35 and 37-45 were allowed; and

Claims 1-8 and 46-61 were rejected.

Claim 60 has been amended, no claims have been canceled, and new claim 62 has been added by the current amendment. Accordingly, claims 1-8, 10-35, and 37-62 are currently pending in the present application.

Formal Matters

Applicant wishes to express appreciation for the Examiner's indication of allowability as to Applicant's claims 10-35 and 37-45.

Rejection of Claims under 35 U.S.C. §102

In the present Office Action, claims 1-3, 46-38 and 54-57 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,370,119, issued to Basso et al. (hereinafter, "*Basso*"). While not conceding that any of the Examiner's cited references qualify as prior art, but instead to expedite prosecution, Applicant has elected to traverse the claim rejections as follows. The following arguments are made without prejudice to Applicant's right to establish, for example in a continuing application, that one or more cited reference(s) do not qualify as prior art with respect to an invention embodiment currently or subsequently claimed. Applicant respectfully submits that the Examiner's cited reference, *Basso*, fails to teach all elements of Applicants' claims and further teaches away from claimed embodiments of Applicant's invention.

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With respect to *Basso* it is stated within the present Office Action that,

Fig. 4 discloses a routing table, which contains information for where the optimum routes are stored. See also col. 6, lines 6-16. Fig. 3 discloses a flow chart of the path computation procedure (generating at least one path cost data set). See also col. 5, lines 53-67, and col. 6 lines 1-6. After computation of optimal paths is complete, the optimal path from the predefined source node to the predefined destination node will be retrieved from the routing table at the table entry corresponding to the destination node (a minimum-hop path and a minimum cost path can be determined from at [*sic*] the path cost data set). See col. 6, lines 6-16, The shortest path from a source node to a destination node will be the path having the smallest cumulative cost, i.e., the smallest sum of the costs of all the links of the path. Examples of typical cost criteria are the minimum hop count and the minimum path length...Because quality of service can include physical distance, the "cost" from Basso et al. can be considered similar to the "cost" from the application...Basso et al. states the following in col. 11, lines 7-12: "the optimal path is the shortest path, that is, the path that has the lowest additive cost. Having the lowest additive cost also includes having the minimal hop count since the additive cost increases with the number of links traversed."

Applicant respectfully disagrees.

Applicant's claim 1, as originally submitted, recites a method for finding a path in a network comprising:

> generating at least one path cost data set, said path cost data set representing a path cost
> between a root node of said nodes and destination node...; and
> accessing said at least one path cost data set wherein
> said generating and said accessing are performed in such a manner that a
> minimum-hop path and a minimum-cost path can be determined from said
> at least one path cost data set

Applicant submits that *Basso* teaches away from the generation and access of at least one path cost data set in such a manner that a "minimum-cost path" can be determined in teaching, as admitted by the Examiner in the present Office Action, the computation of exclusively the "widest" (i.e., highest bandwidth) shortest path between a source node and at least one destination node within a high-speed network. (see *Basso*, Title, Abstract, Column 2, Lines 43-50)

Applicant respectfully submits that while no single factor or characteristic may be determinative of quality of service/cost, higher bandwidth is typically associated with higher quality of service and cost. *Basso* then, by teaching the computation of only the widest shortest

path, teaches the determination of an increased or maximum available cost/quality of service path and cannot therefore possibly be construed as teaching "generating" and "accessing" at least one path cost data set in such a manner that a minimum-hop path and a minimum-cost path can be determined as claimed. (Applicant's claim 1, as originally submitted)

Applicant further respectfully submits that *Basso* fails to teach, "generating" and "accessing" wherein the generating and accessing are performed, "in such a manner that a minimum-hop path...can be determined from said at least one path cost data set" as required by Applicant's claim 1, emphasis supplied, and generally required by Applicant's claims 46 and 54, where "cost is discussed in terms of quality of service, and so can subsume physical distance, availability, cost of service, and other such characteristics" (Applicant's detailed description, Page 48, Lines 25-27, emphasis supplied) and further where "cost" and "hop count" are distinct path characteristics.

Basso teaches, as admitted herein by the Examiner, that hop count is explicitly included as an example of cost in contrast to Applicant's claim 1 which recites the generation of at least one path cost data set, "representing a path cost" where such path cost "is discussed in terms of quality of service" rather than hop count. Applicant's claim 1 further recites that the manner in which such a path cost-representative data set is generated and accessed enables the determination of a minimum hop path. Applicant respectfully submits that *Basso* fails to teach the determination of "a minimum hop path" from a path cost data set which does not explicitly represent hop count.

Accordingly, Applicant respectfully submits that claim 1 is allowable over *Basso*. Applicant's claims 46 and 54 each include one or more elements or limitations substantially similar to those described with respect to claim 1. Accordingly, Applicant respectfully submits that independent claims 1, 46, and 54 are similarly allowable over *Basso*. Claims 2-8, 47-53, and 55-61 depend directly or indirectly from Applicant's claims 1, 46, and 54, respectively, and are therefore allowable for at least those reasons stated for the allowability of those claims. Claims 10-35 and 37-45 are allowable as per the Examiner's indication of allowable subject matter.

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<u>*Rejection of Claims under 35 U.S.C. §103*</u>

In the present Office Action, claims 4-8, 49-53 and 57-61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over **Basso** in view of U.S. Patent No. 5,805,593, issued to Busche (hereinafter, "**Busche**"). While not conceding that any of the Examiner's cited references qualify as prior art, but instead to expedite prosecution, Applicant has elected to traverse the claim rejections as follows. The following arguments are made without prejudice to Applicant's right to establish, for example in a continuing application, that one or more cited reference(s) do not qualify as prior art with respect to an invention embodiment currently or subsequently claimed.

Applicant respectfully submits that the present Office Action fails to establish a *prima facie* case of obviousness under 35 U.S.C. §103. More specifically, Applicant submits that the statement within the present Office Action that, "It would have been obvious to a person of ordinary skill in the art at the time of the invention to set the columns in the table disclosed by Basso et al. so that they correspond to a number of hops. <u>One of ordinary skill in the art would have been motivated to do this because aligning the columns by hop count is just another way of organizing the connections</u> that exist in the network" (emphasis supplied) is insufficient, without more, to provide an adequate suggestion or motivation to combine the Examiner's cited references, **Basso** and **Busche**. **Busche** teaches a DKSP routing table (Fig. 2) and with respect to the described routing table that,

> A local node has a routing table to a given destination node that <u>consists of k entries corresponding to the k neighboring nodes of the local node. For each of the k neighboring nodes, the routing table lists the length of the shortest path to the destination node via that neighboring node</u>. The shortest paths are determined by a k-shortest path algorithm. The k entries in the routing table are sorted by distance so that the neighboring node offering the shortest path to the destination node appears first in the table. For example, FIG. 2 shows the routing table for local node C to destination node Z with respect to the network shown in FIG. 1. (**Busche**, Column 2, Lines 5 – 17, emphasis supplied)

Basso teaches by comparison the computation, storage, and retrieval of information relating to <u>a single, optimal path between a source and destination node</u> (see **Basso**, Column 5, Line 64 – Column 6, Line 13) and fails therefore to teach, show, or suggest multiple paths to a given destination node which may be sorted or aligned by hop count as suggested in the present

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Office Action. Applicant therefore respectfully submits that *Basso* and *Busche* may not be combined and that the present Office Action fails to establish a *prima facie* case of obviousness.

Moreover, *Busche* is cited within the present Office Action as teaching, "a table that is sorted by hop count. See Fig. 2, and col. 4, lines 12-16)" but not "generating" and/or "accessing" at least one path cost data set as claimed. (Applicant's claim 1, as originally submitted) Accordingly, as Applicant has clearly demonstrated herein that *Basso* fails to teach the claimed "generating" and/or "accessing", Applicant respectfully submits that no combination of *Basso* and *Busche* may be construed as teaching, showing, or suggesting the described claim elements. Consequently, Applicant submits that not only does the present Office Action fail to provide an adequate suggestion or motivation to combine *Basso* and *Busche*, but that no combination of the references would teach, show, suggest, or otherwise render obvious all elements of Applicant's claims were such a suggestion or motivation supplied.
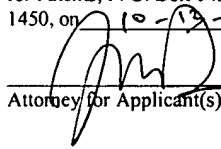
Applicant further respectfully submits that *Busche* fails to teach, show, or suggest, "storing said at least one path cost data set" where the at least one path cost data set represents, "a path cost between a root node of said nodes and a destination node of said nodes" as required by Applicant's claim. (Applicant's claim 4, as originally submitted) The table indicated by the cited portion of *Busche* lists only "the length of the shortest path to the destination node via that neighboring node" (see *Busche*, Fig. 2) and therefore does not include any data regarding path cost as disclosed and claimed by Applicant and previously described herein.

Accordingly, Applicant additionally submits that claim 4 is allowable over the Examiner's cited portions of *Basso* and *Busche*. Applicant's claims 49 and 57 each include one or more elements or limitations substantially similar to those described with respect to claim 4. Accordingly, Applicant respectfully submits that independent claims 4, 49, and 57 and all claims depending therefrom are therefore also additionally allowable over *Basso* and *Busche* for at least those reasons stated for the allowability of those claims.
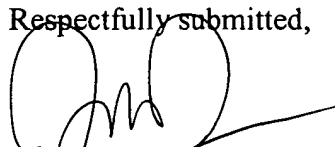
CONCLUSION

Applicant(s) submit that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia, 22313-1450, on _____.

_____   _____
Attorney for Applicant(s)   Date of Signature

Respectfully submitted,

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